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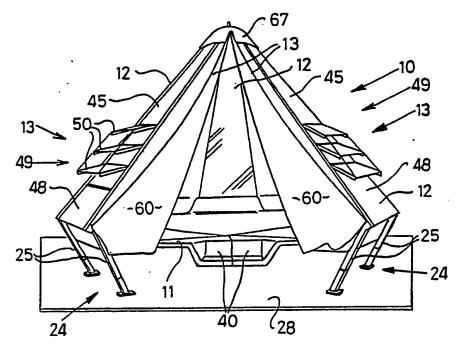
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(54) Title: AN ACCOMMODATION UNIT

Petrie, QLD 4502 (AU).



(57) Abstract

An accommodation unit (10) which has an elevated floor (11) and composite covering comprising fabric panels (13), including a zip-up entrance panel and rigid panels (12) which are provided with louvre windows (13). The covering is supported by struts (19) which extend upwardly from the floor (11) to a peak (18) disposed centrally above the floor (11).

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"AN ACCOMMODATION UNIT"

This invention relates to accommodation units.

Various types of accommodation units are presently available for providing temporary accommodation. For example there are many styles of tents which may be used for camping and general accommodation purposes and there are many styles of caravans which may be used for the same purposes but which provide a higher level of comfort and security. While both these types of accommodation units are very effective in use, in general tents provide basic accommodation while caravans provide more luxurious and secure accommodation. Accordingly tents are relatively inexpensive and provide a low level of comfort whereas caravans are relatively expensive.

A trend which has developed in recent years is the provision of on-site accommodation in caravan parks and the like to provide temporary accommodation for tourists or overnight accommodation for travellers. At present caravan accommodation is utilized for such purposes. However such accommodation is relatively expensive as caravans are made for road travel. On the other hand tents are not suitable for permanent installation to provide temporary accommodation.

The present invention aims to alleviate the above-mentioned disadvantages and to provide accommodation units which will be reliable and efficient in use. Other objectives and advantages of this invention will hereinafter become apparent.

With the foregoing and other objects in view, this invention in one aspect resides broadly in an accommodation unit including:- a supporting frame having frame components extending upwardly from respective positions spaced around the base of said unit; an elevated floor supported by and extending between said frame components above the base of said unit, and covering means for covering said supporting

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frame above said floor.

Preferably the frame components include a plurality of rigid A-frames which extend upwardly to connect to a connector assembly disposed substantially centrally above the floor. It is also preferred that the covering means includes fabric panels and rigid panels. Suitably the fabric covering extends between spaced A-frames and the rigid covering extends across the respective A-frames. Of course hard covering such as ply-wood or fiberglass reinforced plastics panels could be used in lieu of the fabric covering between the A-frames and alternatively fabric covering could extend across the respective A-frames.

In the preferred embodiment of the invention the A-frames are formed from channel shaped members disposed with their open faces outermost and the A-frame covering panels are rigid panels having opposed side flanges which extend downwardly into the channels. The rigid panels may include windows or louvres which may be moved between open and closed positions. Preferably each A-frame is supported with its lower end elevated above the ground by a leg frame which extends downwardly and inwardly from a lower portion of the A-frame. The leg frames are suitably provided with support means for supporting the peripheral edges of the floor which is preferably fully suspended between said sub frames. Of course intermediate supports may be used if required.

The floor is suitably formed of fiberglass reinforced plastics material and is slightly convex so that the central portion of the floor is elevated and drainage means are provided around the periphery of the floor. The floor may also incorporate built-in furniture such as an ice-chest which may extend below the floor and of course it can include built-in furniture such as cupboards, steps and/or beds or the like. Preferably the floor is formed from a plurality of

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segments which may be interconnected to provide a rigid unit which may be suspended from its outer periphery by said leg assemblies.

Suitably the access opening to the accommodation unit is provided in one fabric covering panel. The latter may be provided with an awning or the like to provide a shield against the weather. Preferably the floor is substantially triangular in plan with the apexes truncated to terminate adjacent the base of three of said A-frames. Preferably the truncated apexes form one side of a respective substantially pentagonal floor segment, which may be identical or each contain respective furniture components.

In order that this invention may be more readily understood and put into practical effect, reference will now be made to accompanying drawings which illustrate a typical embodiment of the present invention and wherein:-

FIG 1 is a front perspective view of the accommodation unit;

FIG 2 is a corresponding view illustrating the framework;

FIG 3 is plan view of the floor assembly;

FIG 4 is a cutaway cross-sectional view illustrating the wall to floor connections;

FIG 5 is a perspective view illustrating the apex details of the frame;

FIG 6 is a horizontal cross-sectional view of the frame and cladding;

FIG 7 is a perspective view of a louvered wall panel, and FIG 8 illustrates the accommodation unit provided with extended accommodation areas.

As shown, the accommodation unit 10 is substantially in the form of a tent provided with an elevated floor 11 as well as rigid covering panels 12, which in this embodiment incorporate banks of louvres 13 and fabric covering panels

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14. The floor 11 is substantially triangular however the apex portions 15 are truncated and provided with upwardly extending mounting flanges 16 adapted for connection to respective A-frames assemblies 17 which extend upwardly therefrom to a central apex connector assembly 18 to which respective struts 19 of the A-frames 17 are bolted. The lower ends of the struts 19 pass through snug cutouts 20 in the upper edges of the flanges 16 and extend downwardly therefrom to bolt at 22 to respective top flanges 23 provided on inwardly inclined leg frames 24 which support the A-Frames 17 and the floor 11 above the ground.

As illustrated in FIG 4, each pair of legs 25 of each leg frame 24 bolts to the respective upturned flange 16 of the floor 11. The legs are inclined inwardly and downwardly from the floor 11 and are telescopically adjustable whereby they may be height adjusted to level the floor 11. Each leg 25 is provided with an apertured plate-like foot 27 whereby it may be bolted to a base slab 28 formed of concrete or the like. Each upturned flange 16 forms one side of a respective pentagonal floor segment 30, 31 and 32. The edges 33 of each floor segment adjacent the flange 16 form the perimeter of the floor while the edges 34 remote from the flanges 16 abut corresponding segment edges 34. These edges 34 are provided with downturned flanges 35 whereby they are through bolted together to form a rigid floor unit.

The floor segments 30, 31 and 32 are each formed as a one piece fiberglass reinforced plastics fabrication which bolt together to form a rigid floor unit which is arched upwardly towards its centre 36 so that liquids spilled thereon will flow towards the outer edges 37 which are provided with apertured drainage gutters so as to discharge any spilled liquid or rain which falls on the floor for discharge at selected locations. Furthermore an ice-chest 38 is set into

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the floor segment 30 adjacent the entrance 39 and the edges 33a at the entrance step downwardly at 40 to facilitate entry to the unit 10.

Each A-frame 17 is formed from aluminum channel 41 having a cross-sectional configuration as illustrated in FIG. 6. As shown, the channel 41 is substantially rectangular in cross section and is provided with a bolt rope track 42 along one side flange 43. The channels 41 are arranged in each A-frame assembly 17 with their open-faces 44 outermost such that they form respective drainage channels into which water may be deflected from the covering panels 12 and 14. The louvered panels 13 include a rigid triangular top panel 45 provided with side flanges 46 which extend into the channels 41 across the innermost flange 47 thereof and lower panel 48 and an intermediate louvre panel 49 which form respective banks of hinged louvres 50.

Referring to FIG. 7 it will be seen that each louvre panel 50 extends into the respective channel 41 and is provided with a drip channel 51 at its outer end. Each louvre panel 49 is also provided with a drip flange 52 at its lower end and a lip 53 at its upper end whereby the panels 49 may overlap in a weather proof manner. Each louvre panel 49 is also provided with a hinge bracket which extends into the respective channel 41 and is connected thereto by a push-in hinge pin which passes through an aperture in the inner flange 47. The louvre panels 49 are interconnected for simultaneous operation by a rod 54. Suitable stop means may be provided for holding the louvres in their selected adjusted position.

The fabric panels 14 are each provided with bolt rope edging so that they can be secured into the bolt rope tracks 42 provided in the outermost flanges 43 of the A-frame channels 41. The fabric panel 59 which forms the entrance

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door is formed as a pair of opposed curtains 60 which may be zip connected together to close the entrance. Furthermore as can be seen in FIG. 5 a ridge pole 61 may be connected adjustably at 62 to the apex connector assembly 18 so as to incline downwardly therefrom. The outer end of the ridge pole 61 is supported by a pair of struts and a fabric cover 64 formed integrally with the curtains 60 will provide an integral annex which passes over the ridge pole 61 to provide an extension covering above the entrance curtains 60. The entrance cover is provided with pockets along its outer edges which receive the struts 34. A weather proofing apex cap 67 covers the junction between the covering panels with the apex connector assembly 18.

From the above it will be seen that an accommodation unit of the present invention will provide economical accommodation which will have an elevated floor, ventilating windows in the form of adjustable louvres which may be closed in a weatherproof manner and sufficient space for a pair of beds which may be positioned on the floor remote from the entrance to provide overnight sleeping accommodation and basic facilities. Suitable screens may be provided on the louvres if desired.

As shown in FIG. 8, the accommodation may be enlarged by extending the fabric panels distant from the entrance opening to provide annex extensions 70 in a manner similar to the annex which may be utilized above the entrance 39. Furthermore while the above described embodiments relate to fixed accommodation units, this invention also applies to transportable accommodation units.

It will of course be realised that the above has been given only by way of illustrative example of the present invention and that all such modifications and variations thereto as would be apparent to persons skilled in the art

are deemed to fall within the broad scope and ambit of this invention as is defined in the appended claims.

CUBSTITUTE SHEET

THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:-

- 1. An accommodation unit including:— a supporting frame having frame components extending upwardly from respective positions spaced around the base of said unit; an elevated floor supported by and extending between said frame components above the base of said unit, and covering means for covering said supporting frame above said floor.
- 2. An accommodation unit according to Claim 1, wherein the covering means includes fabric panels and rigid panels.
- An accommodation unit according to Claim 1 or Claim
 wherein said rigid panels include windows or louvres.
- 4. An accommodation unit according to Claim 2 or Claim 3, wherein an access opening to said accommodation unit is provided in one said fabric panel.
- 5. An accommodation unit according to Claim 4, wherein said one fabric panel is provided with an awning.
- 6. An accommodation unit according to any one of the preceding claims, wherein said frame components include a plurality of rigid A-frames which extend upwardly to a connector assembly disposed substantially centrally above said floor.
- 7. An accommodation unit according to Claim 6, wherein said A-frames are formed from channel shaped members disposed with their open faces outermost and said rigid panels extend across said A-frames and into said channel shaped members.

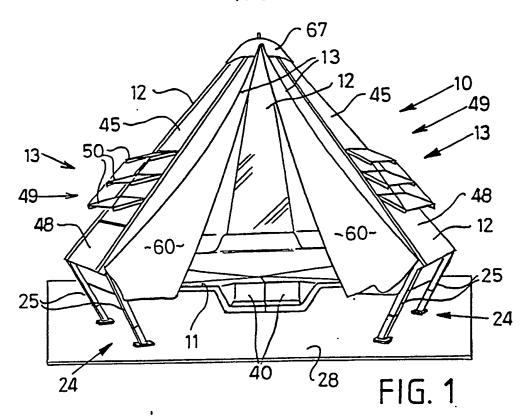
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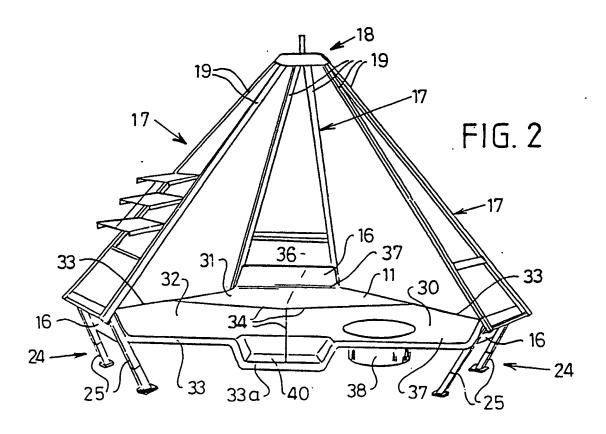
- 8. An accommodation unit according to Claim 7, wherein said rigid panel on at least one said A-frame includes fixed upper and lower panel segments and intermediate louvre panels which extend across said A-frame and into said channel shaped members.
- 9. An accommodation unit according to Claim 8, wherein said fabric panels extend between said A-frames.
- 10. An accommodation unit according to any one of the preceding claims, wherein said frame components are provided with bolt rope tracks to receive bolt rope edging provided on said fabric panels.
- An accommodation unit according to any one of Claims 6 to 10, wherein each said A-frame is supported with its lower end elevated above the ground by a leg frame assembly which extends downwardly and inwardly from said A-frame.
- 12. An accommodation unit according to Claim 11, wherein said leg frames are provided with support means for supporting the peripheral edges of said floor.
- 13. An accommodation unit according to any one of the preceding claims, wherein said floor includes built-in storage which extends below said floor.
- 14. An accommodation unit according to any one of the preceding claims, wherein said floor is formed from a plurality of segments which are interconnected to provide a rigid unit suspended from its outer periphery by said leg frame assemblies.
- 15. An accommodation unit according to Claim 14, wherein

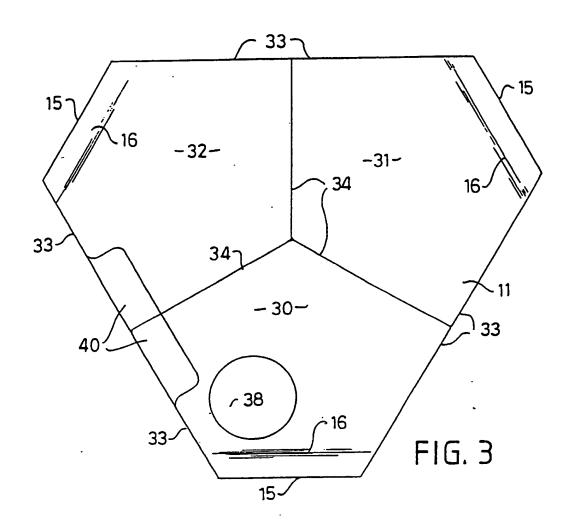
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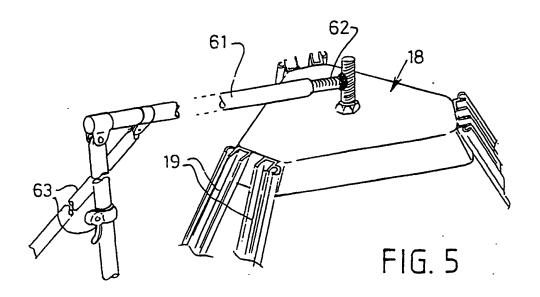
said floor segments are three substantially pentagonal segments and three said A-frames extend upwardly to a central position above said floor from a respective side of each said floor segment.

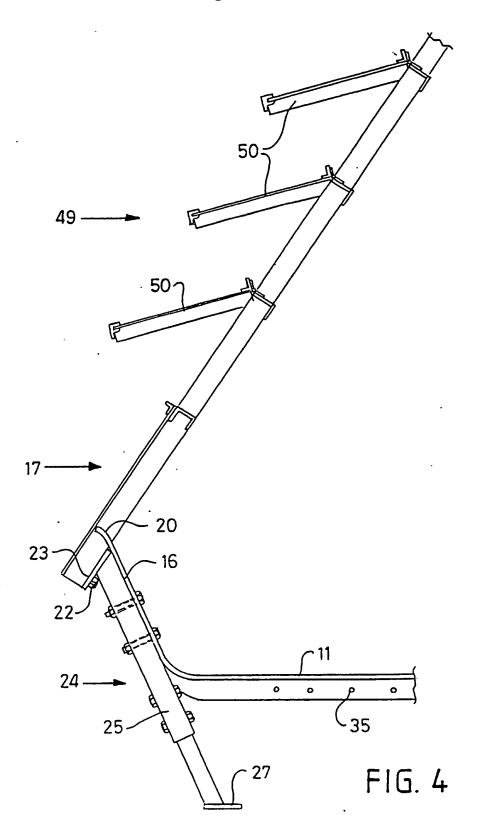
16. An accommodation unit substantially as hereinbefore described with reference to the accompanying drawings.

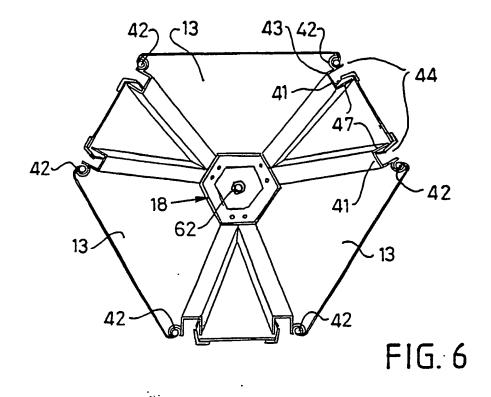












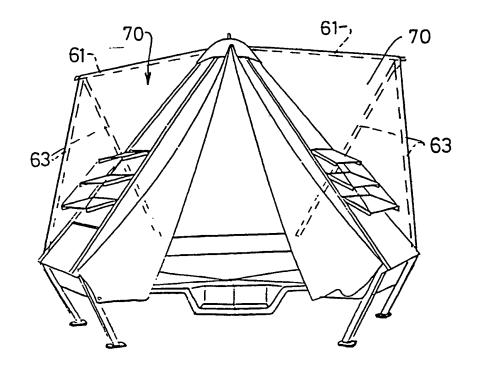
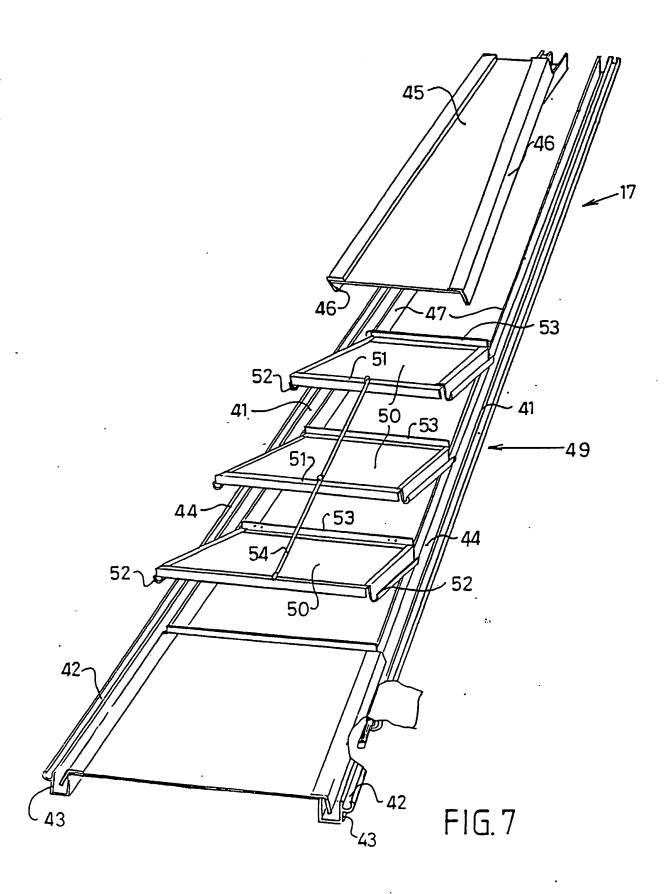


FIG. 8



INTERNATIONAL SEARCH REPORT

International Application No PCT/AU 88/00011

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III. DOCUMENTS CONSIDERED TO BE RELEVANT		Relevant to Claim No. 13	
stenory * 1 Citation of Occument, " with indication, where appropri	riste, of the relevant passages "-		
THE MARKET AND THE PROPERTY OF	er 1964 (03.12.64)	(1-5)	
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X DE,A, 2035256 (ZURAWSKI) 27 Janu	an 1071 /17 00 71)	(1-6)	
X FR,A, 2071892 (SMITH) 17 Septemb	er 19/1 (1/.05:/1/	(1-6)	
χ GB,A, 1104068 (MAYMONT) 21 Febru	ary 1968 (21.02.08)	(1-0)	
' X GB,A, 1362199 (ELKINS et al) 31	July 1974 (31.07.74)	(1-0)	
X US,A, 3214872 (VOGELGESANG) 2 No	ovember 1965	(1-6,11,12)	
(02.11.65) X US,A, 3283693 (HOWELL) 8 Novembe	or 1966 (08.11.66)	(1-6)	
X US,A, 3283693 (HUWELL) 8 NOVEMBE	1057 (05.03.57)	(1-6)	
A US,A, 2783766 (KOHLBECK) 5 March	1 195/ (05.05.5//	(1)	
A US,A, 3578003 (EVERETT) 11 May 1	1971 (11.05./1)	(1)	
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IV. CERTIFICATION	Date of Mailing of this Internations	Search Report	
Date of the Actual Completion of the International Search 21 April 1988 (21.04.88)	<u> </u>	APRIL 1988	
International Searching Authority Australian Patent Office	Signature of Authorized Officer - Wigh Ness	HUGH NESS	

ANNEX TO THE INTERNATIONAL SEARCH REPORT ON INTERNATIONAL APPLICATION NO. PCT/AU 88/00011

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Pate	ent Document ed in Search Report	-	·	Patent Family Members	
FR	2071892	GB.	1294692		

END OF ANNEX